DOCUMENT RESUME

ED 406 049 PS 025 290

AUTHOR Blakemore, Judith E. Owen; Russ, Lisa S.
TITLE Preschool Children's Attitudes about Deviations from Gender-Role Behaviors.
PUB DATE Apr 97
NOTE 48p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (62nd, Washington, DC, April 3-6, 1997).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Age Differences; Behavior Standards; *Childhood Attitudes; Moral Values; *Preschool Children; Preschool Education; *Sex Role; Social Behavior; Value Judgment
IDENTIFIERS Gender Issues

ABSTRACT

This study examined 3- to 7-year old children's knowledge about gender roles and moral and social norms, their beliefs about the possibility of violating these roles and norms, and their attitudes about children who do. The gender role norms were grouped into several categories: toys, games, play styles, adult occupations, adult parental roles, hairstyles, and clothing. Participants were 90 children divided into three age groups; they were asked individually about 20 items concerning gender, moral, and social transgressions and used a "smiley face" Likert scale in responding. Results showed that the study's first hypothesis, that children's knowledge about gender, social, and moral norms increases between the ages of 3 and 7, was supported. The second hypothesis, that beliefs about whether it is possible to violate gender norms would increase with age, was not confirmed. Regardless of age, children generally believed it was possible to violate almost all the norms, with social and moral norms harder to violate than gender norms. The third hypothesis, that moral violations would be judged to be more serious than violations of social or gender norms, was confirmed, as was the fourth hypothesis, that boys' gender-role violations involving physical appearance would be judged to be more serious than similar transgressions by girls. (Contains 21 references.) (EV)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 406 049

Preschool Children's Attitudes About Deviations from Gender-Role Behaviors

Judith E. Owen Blakemore

Indiana University - Purdue University Fort Wayne

Lisa S. Russ

Indiana University

Poster presented at the biennial meeting of the Society for Research in Child Development, April 1997, Washington, DC.

PS 025290

Address correspondence to:
Judith Blakemore
Department of Psychological Sciences
Indiana University - Purdue University, Fort Wayne
Fort Wayne IN, 46805
E-mail: blakemor@cvax.ipfw.indiana.edu

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Judith E. Owen Blakemore

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

The authors would like to thank Christopher Cox, Arlene Hartsough, Adam McCray and Sharon Williams for their assistance with data collection.

BEST COPY AVAILABLE

Abstract

The present study examined 3- to 7-year-old children's knowledge about gender-role, moral, and social norms, their beliefs about the possibility of violating them, and their attitudes about children who do. The gender-role norms were in several categories: toys, games, play styles, adult occupations, adult parental roles, hairstyles, and clothing.

The children's knowledge was socially conventional and became more so with increasing age. They judged it to be more possible as well as more desirable to violate gender norms than social or moral norms. Sometimes boys' gender violations were judged to be worse than girls' (e.g., clothing and hairstyles), and sometimes girls' violations were judged to be worse than boys' (e.g., rough physical play and sports).

Preschool Children's Attitudes About Deviations from Gender-Role Behaviors

Over the last few decades several researchers have been examining cognitive aspects of children's gender-role development. Much of this research has focused on the knowledge that children acquire about gender, and some on the relationships between that knowledge and children's gender-related preferences or role behaviors.

Children begin to acquire knowledge about gender at a very young age (Huston, 1983; Martin, 1989, 1991, 1993; Martin & Halverson, 1981; Martin, Wood, & Little, 1989; Poulin-Dubois, Serbin, Kenyon, & Derbyshire, 1994; Roopnarine & Mounts, 1987; Signorella, 1987; Thompson, 1975). They also develop gender-appropriate preferences for toys and occupations during these early years (Caldera, Huston & O'Brien, 1989; O'Brien & Huston, 1985), but it's clear that the link between these preferences and children's knowledge is quite complex (Blakemore, LaRue & Olejnik, 1979; Perry, White & Perry, 1984; Martin, 1991, 1993). An important distinction in this research is between children's knowledge about gender stereotypes and their attitudes about the appropriateness of violating gender norms (Signorella, 1987; Signorella, Bigler & Liben, 1993). Children acquire knowledge about many aspects of gender roles at a fairly young age, yet the degree to which they accept the violation of these norms varies by individual and by age.

In the research concerning children's attitudes about gender-role violations, children have been asked to make judgments about a variety of gender-role categories (e.g., clothing, hair, other aspects of appearance, toys, sports, other activities, and adult occupations). Sometimes those judgments have focused on whether children believe it is possible to cross

gender barriers and sometimes they have focused on the children's opinions of others who engage in such gender-role violations.

Not surprisingly, given the number of different categories that have been studied, and the different questions that have been asked, this research has produced conflicting findings that are difficult to interpret. One difficulty is the question of whether the gender-role violations of boys are judged to be more serious than those of girls. Some researchers (Carter & McCloskey, 1983-1984; Levy, Taylor, & Gelman, 1995; Smetana, 1986) have found that boys were judged more harshly than girls for violating at least some gender norms, while others have not (Carter & Patterson, 1982; Stoddart & Turiel, 1985). When one examines the age of the children or the domain of the violation (appearance, toys, etc.) no clear pattern emerges with the possible exception that appearance-related violations may be particularly likely to generate harsher judgments about boys.

One of the obvious concerns about the research in this area, is that researchers have asked children about several different kinds of gender-role behavior. It is certainly possible that gender-role violations may not be viewed in a unitary manner. That is, children may not evaluate boys wearing lipstick or dresses in the same manner as they evaluate boys who are nurturant or who play with certain girls' toys. It is also the case that previous research has not made systematic comparisons among the different types of gender-related behavior or attributes. For example, Levy et al. (1995) compared appearance violations for boys to activity violations for girls. Researchers have rarely directly compared a boy wearing a dress to a girl wearing a suit and tie, or a girl with a crew cut to a boy with long curly hair.

There are many aspects to gender-role behavior. Social psychologists (Deaux & Kite,

1993) have suggested that gender roles consist of role behaviors and activities, personality attributes, and physical appearance, including such things as hair and clothing. For children these different aspects of gender roles might be said to include physical appearance, toys, childhood role behaviors and activities, and adult roles to which children might aspire.

In the present study we included all of these aspects of gender-role behavior, and we made direct comparisons between similar violations for boys and for girls. That is, we asked about boys who played with girls' toys (Barbies and a toy kitchen) and about girls who played with boys' toys (G.I. Joes and cars). We made similar direct comparisons between hairstyles, clothing (suits versus dresses), adult parenthood roles (daddy versus mommy), adult occupational roles (doctor vs. nurse), childhood activities (hopscotch and jumprope versus baseball and football), and play styles (quiet, gentle play versus loud, rough play). We also included social etiquette (eating with fingers and coughing on someone) and moral (stealing and pinching) violations as a comparison to the gender-related domains. We measured children's knowledge about the activities, their attitudes about whether it was possible to violate these norms (traditional flexibility), and their attitudes about children who did so (evaluative flexibility). We studied children from the ages of 3 to 7 years as this is the time period that gender-related knowledge and attitudes are being consolidated. We hypothesized the following:

1. Knowledge about the appropriateness of moral and social behavior and about gender norms will increase between the ages of 3 and 7.
2. Traditional flexibility, that is whether it is possible for the other gender to engage in these actions, will also increase with age.

3. Moral violations will be judged to be more serious than violations of social etiquette, and more serious than gender-role violations in most cases.

4. Boys' gender-role violations will be judged to be more serious than girls' when the violations concern physical appearance.

In addition to these specific hypotheses we were also interested in examining the direct comparisons between certain gender-role violations for boys and girls. We thought it likely that certain norm violations of boys might be judged similarly to those of girls. We were also very interested in the possibility that some gender-role violations of girls might be judged more serious than comparable violations of boys.

Method

Participants

Ninety children (42M; 48F) ranging in ages from 38 to 91 months participated. Children were divided into three age groups (youngest: <49 months, $\underline{M} = 43.62$, $\underline{SD} = 2.93$; middle ≥ 49 months - ≤ 60 months, $\underline{M} = 54.81$, $\underline{SD} = 3.63$; oldest: > 60 months, $\underline{M} = 71.45$, $\underline{SD} = 8.91$). The majority of the children were White with a small number of African American and Hispanic children.

Materials

The children were asked about 20 items concerning gender, moral, and social transgressions. The two moral transgressions, stealing money and pinching someone, were selected from the three moral transgressions used by Levy et al. (1995). The two social transgressions, eating with fingers as opposed to a spoon and coughing on another person, were also selected from the three social transgressions used by Levy et al. (1995).

The sixteen gender-role transgressions included: activities (2), toys (4), appearance (4), adult occupations (2), adult parental roles (2), and play style (2). The female (8) and male items (8) were matched as closely as possible. The female gender transgression items included: a girl playing football and baseball, a girl playing with cars, a girl playing with G.I. Joes, a girl with a boy's hairstyle, a girl wearing a suit and tie, a girl wanting to be a doctor, a girl wanting to be a daddy, and a girl engaging in rough play. The male gender transgression items included: a boy playing jumprope and hopscotch, a boy playing with a toy kitchen, a boy playing with Barbies, a boy with a girl's hairstyle, a boy wearing a dress, a boy wanting to be a nurse, a boy wanting to be a mommy, and a boy engaging in quiet and gentle play. All 20 items may be seen in Table 1.

For each of the 20 items, the children answered four questions, for a total of 80 questions. The first question for each item investigated knowledge of gender stereotypes or social and moral norms (e.g., Who usually plays with a toy kitchen: boys or girls?; How do people eat ice cream: with a spoon or with their fingers?). The second question for each item asked if a gender, moral, or social transgression was possible (e.g., Can boys also play with a toy kitchen?; Can people also eat with their fingers?). The third and fourth question for each item investigated the children's attitudes about a transgression. The children were asked how much they would like being friends with a person who committed a moral, social, or gender-role transgression. For example, they were asked "How much would you like to be friends with a boy who plays with a toy kitchen?" This question was scored with a 5-point Likert scale using "smiley" faces that meant "I would really not like it," "I would not like it a little," "It wouldn't matter," "I would like it a little," and "I would like it a lot."

The children were then asked what it is like when a person commits a moral, social, or gender-role transgression. For example, "What's it like when a boy plays with a toy kitchen?" This question was also scored with a 5-point Likert scale using "smiley" faces that meant "very bad," "bad," "it doesn't matter," "good," and "very good."

Color pictures taken from a catalog were shown to the children for eight of the items (toy kitchen, cars, Barbie, G.I. Joes, boy clothes, girl clothes, girl hair, boy hair). When the picture depicted a human being (e.g., clothes, hair) or the replica of a human being (e.g., Barbie), both a White and an African American model were shown. In the picture of the boys' hairstyles, two boys were shown from the side with short, dark hair. The children could see that the boys' hair is cut above the ear and to the top of the back of the neck. In the picture of the girls' hairstyles, one girl has long, curly red hair that hangs down past her shoulders, and the other girl's hair is tied up in with a big pink bow. In the picture of boys' clothes, the two models were wearing suits, shirts, and ties with laced dress shoes. In the picture of girls' clothes, the models were wearing dresses with ruffled skirts, socks with ruffles, and dress flats. In the pictures of clothes, the heads of the models were covered up to prevent the children from answering the questions based on the hair and faces of the models.

Two different semi-randomized forms of the questionnaire were used, both containing the same 20 items. Approximately equal number of both forms were completed. The items in the two forms were ordered randomly with the constraint that items accompanied by a picture were organized at even intervals throughout the form. For each item, the knowledge question was asked first, next the flexibility question, and lastly the two

attitude questions.

Procedure

Each child was tested individually by one of six (4F; 2M) White experimenters. The children were told they would be asked to answer several questions and would be shown pictures along with some of the questions. The children were then shown a card with five "smiley" faces, representing the Likert scale, and were asked to discuss with the experimenter the attitudes and emotions the faces conveyed. The children held the "smiley" face card and pointed at the face along with their verbal response throughout the interview.

After instructions were given to the child, the experimenter began asking the questions for the first item. The experimenter repeated the exact meaning of the "smiley" faces for each child during the third and fourth questions for the first and second items. Once the child had heard the exact meanings two times, the child no longer was told the meanings of the faces by the experimenter. The child was simply asked to point to the face that best depicted his or her response and verbally state the response. If a child did not appear to understand the meanings of the faces (e.g., the verbal response did not agree with the face the child pointed at), the experimenter repeated the exact meanings again for the child. If a picture accompanied the item, the subject was shown the picture before the knowledge question. The picture remained visible to the child throughout all four questions. For the knowledge questions, the children were given two choices (e.g., boys or girls) by the experimenter and were asked to verbally respond. "Both" was accepted as a response even though it was not offered as one of the two choices. The children were given a choice of a "yes" or "no" response to the flexibility question. For the attitude questions, the children

were asked to both point at the smiley face card and to verbally respond.

Results

Knowledge

For each of the gender-stereotyped items the children were asked: "Who usually [plays with/wears/does the item]: boys or girls?" For the social and moral norm questions the children were asked how people usually did these things (See Table 1 for examples). The children's responses were scored such that when a child said an item was used by boys the response was given a score of 1; when an item was identified as used by girls, it was given a score of 2; and when a child spontaneously said it could be used by either, that response was given a score of 1.5. Therefore, mean scores above 1.5 indicate that the majority of the children believed the item was more often female-stereotyped, and the closer the score was to 2.0, the stronger the stereotyping of the answers. Scores below 1.5 indicate the item was more often seen as male-stereotyped with scores closer 1.0 being more strongly stereotyped. With respect to the social and moral items, a score of 1.0 was in the socially desirable direction, and 2.0 in the direction of the violation of the social or moral rule.

Each of these items was analyzed with a 3 (age) X 2 (gender) ANOVA. Ten of the 20 questions showed a significant effect of age. In general, these effects indicated that older children's knowledge about the items was in the expected direction more often than that of the younger children. That is, the children were more likely to identify the more socially-appropriate moral and social behaviors, and to identify the gender-related items in the stereotyped direction with increasing age. To examine which age groups differed, post-hoc comparisons were made using the Student-Newman-Keuls (SNK) procedure. The youngest

children always differed from the oldest children, and sometimes the middle group differed from either the youngest or the oldest group. This indicates that knowledge about these items appears to be gained at somewhat different rates. A summary of the age findings can be found in Table 2.

In examining the means of the items that didn't show an effect for age, several showed similar trends with increasing age, or were already identified by the youngest children in the stereotyped direction, and were therefore close to ceiling. Knowledge of only one item, "quiet/gentle play," was not in the stereotyped direction by the oldest age, although the means increased in the expected direction, but not significantly.

In addition to the effect of age, a few items showed gender differences and or interactions between age and gender. Girls were more likely to say that Barbie dolls were for girls, F (1,81) = 5.15, $p < .05$; Girls = 1.83, Boys = 1.68, although boys' scores were also in the stereotyped direction, being above 1.5. Similarly, girls were more likely to say that toy kitchens were for girls, F (1,81) = 6.65, $p < .02$; Girls = 1.76, Boys = 1.59, again both above 1.5. Girls also indicated a more frequent belief that girls could become daddies, F (1,83) = 5.13, $p < .05$; Girls = 1.13, Boys = 1.02. However, both boys' and girls' scores are strongly stereotyped in the male direction. Girls were also more likely to say that quiet/gentle play was more characteristic of girls than were boys, F (1,83) = 6.18, $p < .02$; Girls = 1.49, Boys = 1.30. Note that neither of these scores is female stereotyped (above 1.5). Instead, on average, girls saw quiet play as neutral and boys saw it as characteristic of boys.

Two items, Barbie dolls and doctors, also showed significant Age x Gender

interactions, F (2,81) = 3.25, $p < .05$, and F (2,83) = 4.78, $p < .02$, respectively. Examination of the means using SNK indicated no significant differences among the means for the doctor item. In the case of Barbie dolls, the youngest boys were significantly less likely (M = 1.41) than all other groups to say that Barbie dolls were for girls. The older two groups of boys and all three groups of girls were not significantly different from each other. Their mean scores ranged between 1.77 and 1.86.

We also made direct comparisons between matched gender-role items (e.g, boy hair compared to girl hair) with a series of 3 (age) x 2 (gender) x 2 (gender stereotyping of item - repeated measure) ANOVAs. In these analyses we were looking for differences involving the gender stereotyping of the item, and interactions between gender stereotyping and the children's age or gender. In all cases there was a significant effect involving the comparisons of the items. For example, children identified boys' hair as characteristic of boys (M = 1.10), and girls' hair as characteristic of girls (M = 1.91), F (1,84) = 372.23, $p < .001$. There were similar findings involving boys' (1.17) versus girls' (1.59) clothes, F (1,84) = 62.66, $p < .001$; the toy cars (M = 1.25) versus the toy kitchen (M = 1.68), F (1,81) = 87.46, $p < .001$; the G.I. Joes (M = 1.22) versus the Barbie dolls (M = 1.76), F (1,82) = 119.53, $p < .001$; daddy (M = 1.08) versus mommy (M = 1.49), F (1,82) = 47.38, $p < .001$; doctor (M = 1.27) versus nurse (M = 1.51), F (1,83) = 18.3, $p < .001$; football/baseball (M = 1.12) versus hopscotch/jumprope (M = 1.59), F (1,83) = 89.05, $p < .001$; and loud/rough play (M = 1.24) versus quiet/gentle play (M = 1.39), F (1,84) = 7.37, $p < .01$. While all male stereotyped items were clearly in the male direction (score less than 1.5), some of the female stereotyped items were close to the midpoint (clothes,

mommy, nurse) or in the male direction (quiet play).

We also examined interactions between the stereotyping of the item and the children's age or gender. Several of the interactions between age and the stereotyping of the item were significant. There were no significant interactions involving the children's gender. There was an interaction between age and the kitchen/car comparison, $F(2,81) = 4.44$, $p < .02$; the mommy/daddy comparison, $F(2,82) = 8.48$, $p < .001$; the Barbie/G. I. Joe comparison, $F(2,82) = 4.48$, $p < .02$, the sports/hopscotch comparison, $F(2,83) = 4.79$, $p < .02$; and the girl clothes/boy clothes comparison, $F(2,84) = 7.61$, $p < .001$. The means that are relevant to these interactions can be found with the appropriate items in Table 2. These interactions essentially show that the female stereotyped items' scores rise with age (become more female stereotyped) while the male stereotyped items' scores become lower (more male stereotyped) with age. That is, these analyses confirm that the children recognized the stereotyping of these items, and that this stereotyping became more pronounced with age.

While the previous analyses confirm the children's knowledge of the conventional or stereotyped aspects of these items, they don't clarify whether the children's knowledge of each category was similarly stereotyped. To examine this issue, the eight girl items, eight boy items, two social items, and two moral items were averaged and analyzed. As discussed above, responses were coded such that if children identified a gender-stereotyped item as being for boys it was given a score of 1, and for girls it was given a score of 2. Social and moral items received a score of 1 in the conventional direction. Because we were simply interested in the absolute value of these responses, we recoded the girl-stereotyped items so

that the scores were consistent with the other three categories (1 = conventional or stereotyped direction) prior to conducting these analyses.

This analysis was a 4 (question type: social, moral, girl, boy - repeated measures) X 3 (age) X 2 (gender) ANOVA. There were main effects of question type, F (3,222) = 21.47, $p < .001$, and age, F (2,74) = 7.69, $p < .001$, and no interactions. To examine the effect of age we combined and averaged the moral, social, boy, and girl items and compared the three ages using SNK. Consistent with the findings discussed above, this analysis showed that the younger children's answers (M = 1.36) were less conventional than those of the older two groups who didn't differ from each other (Ms 1.26 and 1.19, respectively), although the means indicated a trend in the direction of the oldest children being most conventional.

To further examine the main effect of question type we did a series of 2 (question type, each 2-way repeated measure comparison) X 3 (age) ANOVAs. These effects indicated that boy items (M = 1.19) and social items (M = 1.20) were most strongly stereotyped or conventional. That is the children were most likely to say that boys (and not girls or either gender) did boy items and that socially conventional behavior was way people typically acted. These categories did not differ from each other but did differ from the moral and girl stereotyped categories. Children were more likely to say that people typically acted in the conventional moral direction (M = 1.26) than to say that girls (rather than boys or both gender) used girl stereotyped items (recoded M = 1.38). These results then indicate that male items seem to be stereotyped more strongly and probably earlier than female items, and that these particular moral and social conventional transgressions were seen as more typical

than or equal to the frequency of girls engaging in boy activities, but less typical than the frequency of boys engaging in girl activities, which was judged, perhaps surprisingly, to be the most likely of all these violations. The effects of age and question type can be seen presented graphically in Figure 1.

Traditional Flexibility: Is it possible?

The children were asked if it was possible for the other gender to engage in any of the gender-stereotyped activities or to engage in the moral or social violation. For these responses, yes was coded 2 and no was coded 1. Scores above 1.5 therefore indicate that the children tended to say that these things were possible.

The children believed most of these norm violations were possible. They gave the highest scores to playing with the other gender's toys or engaging in the other gender's occupations. The items seen as less possible were generally either biologically based (mother/father) or social or moral violations. The ranking of these items can be seen in Table 3.

The majority of these items produced no significant age or gender differences or interactions, although there were some effects. All these effects were in the direction of girls being more flexible than boys, and most concerning male-stereotyped items. Girls (M = 1.80) were more inclined than were boys (M = 1.60) to say that girls could have boys' hairstyles, F (1,82) = 5.05, $p < .05$; that girls could play with G. I. Joes (girls' M = 1.87; boys' M = 1.69), F (1,83) = 4.07, $p < .05$; that girls could be doctors (girls' M = 1.96; boys' M = 1.73), F (1,83) = 9.97, $p < .002$; and that girls could become daddies, although that wasn't judged very likely (girls' M = 1.29; boys' M = 1.10), F (1,83) =

6.84, $p < .02$. This item, girls becoming daddies, also produced a significant age effect, F (2,83) = 6.10, $p < .003$, and a significant Age X Gender interaction, F (2,83) = 4.47, $p < .02$. Post-hoc tests indicated that the interaction (as well as the age effect) was due to the youngest girls (M = 1.64) being significantly more likely than all other groups (all means $\leq$ 1.2), who did not differ from each other, to say that girls could become daddies. Finally, girls (M = 1.49) were more likely than boys (M = 1.24) to say that boys could have girls' hairstyles, F (1,83) = 6.06, $p < .02$, although even the girls' score was not above 1.5.

We also made direct comparisons between matched gender-role items (e.g, boy hair compared to girl hair) with a series of 3 (age) x 2 (gender) x 2 (gender stereotyping of item - repeated measure) ANOVAs. In these analyses we were looking for differences involving the gender stereotyping of the item, and interactions between gender stereotyping and the children's age or gender. That is, we wondered whether the children were more likely to think that it was possible for the other gender to engage in boy-linked versus girl-linked behaviors. There were eight such comparisons. In three cases (boys' clothes vs. girls' clothes; quiet play vs. rough play; and toy kitchen vs. toy cars) there were no significant effects. In other cases there were effects of both the children's gender and the activity's gender-link as well as interactions.

The children judged that it was less possible for boys to wear girls' hairstyles (M = 1.37) than for girls to wear boys' hairstyles (M = 1.71), F (1,83) = 28.97, $p < .001$. On the other hand, they judged that it was more possible for boys to become mommies (M = 1.31), than for girls to become daddies (M = 1.20), F (1,82) = 7.04, $p < .01$; and more possible for boys to play jumprope and hopscotch (M = 1.96) than for girls to play baseball

and football (M = 1.60), F (1,84) = 44.22, p < .001.

There were two instances in which girls judged gender-related deviations to be more possible than boys did. Girls (M = 1.65) were more flexible about cross-gender hairstyles than were boys (M = 1.42), F (1,83) = 10.26, p < .002. Similarly girls (M = 1.90) thought it very possible for gendered occupational barriers to be crossed (girls to be doctors or boys to be nurses), while boys (M = 1.72) thought it somewhat less possible, F (1,82) = 7.04, p < .01.

Finally, the comparison of Barbies and G.I. Joes produced two interactions, one with gender, F (1,82) = 7.90, p < .01, and one with age, F (2,82) = 3.83, p < .05. The interaction involving gender reflected the finding that girls (M = 1.87) were more likely than boys (M = 1.69) to say that girls could play with G.I. Joes, but that both genders (Ms = 1.68 and 1.70) were equally likely to say that boys could play with Barbies. The interaction involving age did not produce a meaningful pattern of results.

We also did a comparison of the average gender deviations (averaged across all eight deviations for each gender) compared to the average social and moral deviations with a 4 (repeated measure, deviation type: social, moral, boy, girl) X 2 (gender) X 3 (age) ANOVA. This analysis produced a significant main effect of question type, F (3,225) = 27.09, p < .001. Post-hoc analyses indicated that the children judged deviations from boy stereotyped items (M = 1.70) to be as possible as deviations from girl stereotyped items (M = 1.68), and both to be more possible than moral (M = 1.42) and social (M = 1.48) deviations, which did not differ from each other.

The analysis also produced a Gender by Question Type interaction, F (3,225) = 3.66,

$p < .02$. Post-hoc tests indicated that girls were more flexible with deviations involving boy-stereotyped items (e.g., can girls wear boys' hairstyles, etc.), but that there were no significant gender differences involving the summary scores of girl-stereotyped, social, or moral items. This pattern is presented in Figure 2.

Evaluative Flexibility: Is it Desirable?

The children were asked to make judgments about the desirability of engaging in violations of these norms. Two questions were asked about each item. First, the children were asked how much they would like being friends with a person who committed a moral, social, or gender-role transgression. In the other evaluative question the children were asked what it was like when a person violated one of these norms. This question was also scored with a 5-point Likert scale with choices ranging from "very bad" to "very good." These items were scored such that a higher score indicated a more positive evaluation. A score above 3.0 would therefore indicate a generally positive evaluation of the behavior, and below 3.0, a generally negative one.

We first examined the relative evaluations of engaging in these norm violations. The ratings of the items on both evaluative questions can be found in Table 4. The most negatively evaluated behaviors were the social and moral (except for eating with fingers), the biologically-based gender roles (mommy and daddy), boys adopting female appearance (clothing and especially hair), boys becoming nurses, and girls playing rough or engaging in sports. The most positively evaluated items were boys playing in the kitchen, playing jumprope/hopscotch, or playing quietly; girls playing with cars or G.I. Joes, and girls wanting to be doctors.

We did a series of 2 (gender) X 3 (age) ANOVAs of the evaluative ratings of these items. The majority of these analyses produced no age or gender effects. That is, the boys and girls of all three age groups made similar evaluations of the norm violations. There were three items (boy hair, girl hair, and doctor) in which girls judged the violations to be more acceptable than did boys, on both questions (friends with and good/bad). Girls also were less likely than boys to condemn girls who wanted to be daddies on the good/bad question. There were also three significant Age X Gender interactions, but they were generally smaller and not consistent across the two evaluative questions. These effects can be seen in Table 5.

There was also one effect of age in which the oldest children ($\underline{M}$ = 2.19) seemed more likely to condemn the stealing of money than the middle ($\underline{M}$ = 2.46) or youngest ($\underline{M}$ = 3.15) children, $\underline{F}$ (2,82) = 3.44, $\underline{p} < .05$. However, none of these means were significantly different from the others on post-hoc examination with SNK.

We also made direct comparisons between matched gender-role items (e.g, boy hair compared to girl hair) with a series of 3 (age) x 2 (gender) x 2 (gender stereotyping of item - repeated measure) ANOVAs with both of the evaluative questions. There were some effects of the children's gender. These all involved girls being more positive toward gender-role violations than boys, and can be seen in Table 6.

There were several effects involving the gender stereotyping of the items. In some cases the children judged boys who were violating norms to be less acceptable, and in some cases they judged girls to be less acceptable. In most cases this held true for both the "friends with" and "good/bad" questions. In one case (Barbies for boys vs. G.I. Joes for

girls) there was no difference in how the violations were seen on either evaluative question.

The children were more negative about boys taking on female appearance (hair, clothing) than girls taking on male appearance, and more negative about boys wanting to be nurses or mommies than girls wanting to be doctors or daddies. On the other hand, they were more negative about girls playing with cars than boys with the kitchen, more negative about girls playing sports than boys playing jumprope or hopscotch, and more negative about girls playing rough than boys playing quietly. The effects of the stereotyping of the items can be seen in Table 7. Figure 3 presents the findings for the "friends with" question. There were also a few significant interactions which produced no significant results with post-hoc comparisons and will therefore not be discussed further.

Finally, we also did a comparison of the average gender deviations (averaged across all eight deviations for each gender) compared to the average social and moral deviations with a 4 (repeated measure, deviation type: social, moral, boy, girl) X 2 (gender) X 3 (age) ANOVA for each of the two evaluative questions.

The analysis of the "would you like to be friends with" question produced a main effect of question type, F (3, 240) = 62.66, $p < .001$. Comparisons between the pairs of question types showed that the boy items (M = 3.28) were not judged differently than the girl items (M = 3.24), and that both were judged more positively than deviations from social norms (M = 2.56), which were in turn judged more positively than violations of moral norms (M = 1.98). These findings are presented in Figure 4.

This analysis also produced a significant interaction between age and question type, F (6,240) = 2.27, $p < .05$, and another between gender and question type, F (3,240) = 3.01,

$p < .05$. The interaction with age reflected a finding that the youngest group of children ($M = 2.50$) were more positive about moral deviations than the older two groups ($Ms = 1.87$ and 1.75), but that age effects were not found in the other items. The interaction with gender reflected the finding that girls were more positive than boys about violations of gender-related and moral violations, but that there were no gender differences in the evaluations of violations of social norms.

The analysis of the "good/bad" question produced a main effect of question type, $F (3,240) = 54.32$, $p < .001$. Comparisons between the pairs of question types showed the same pattern of results as found above in the "friends with" question, and are presented with that question in Figure 4. There were no differences between the "boy" ($M = 3.23$) and "girl" ($M = 3.25$) items. The gender-related violations were rated significantly more positively than the violations of social norms ($M = 2.58$), which in turn, were rated more positively than violations of moral norms ($M = 2.10$). This question also produced a main effect of gender, $F (1,80) = 4.31$, $p < .05$ in which the girls' evaluations ($M = 2.92$) were more positive than the boys' ($M = 2.64$) were. No interactions were found on this question.

Discussion

We hypothesized that the children's knowledge about gender, social, and moral norms would increase between the ages of 3 and 7. The findings clearly indicated that it did so in all categories. In some cases, however, the children already showed a fair degree of conventional knowledge at the youngest ages.

We also hypothesized that beliefs about whether it was possible to violate gender norms would increase with age. This hypothesis was not confirmed. Regardless of age, the

children generally believed it was possible to violate almost all of these norms. They made clear distinctions among the type of norms, however. There were less inclined to believe it was possible to violate social or moral norms than gender norms, and made no distinction between masculine or feminine norms when averaged across all the items, although they did so in particular cases. The gender-related items believed least possible for the other gender to do were the biologically-based categories of mommy and daddy. When there were differences, girls were more likely than boys to believe it was possible to cross gender barriers, especially for girls to adopt masculine appearance or occupations.

Our third hypothesis was that moral violations would be judged to be more serious than violations of social and gender norms. This hypothesis was confirmed. Although we did not hypothesize it, social violations were also judged to be more serious than gender violations. This seemed to be related to the particular social violations used in this study. The children treated eating ice cream with the fingers as a relatively trivial violation, and similar to many of the violations of gender norms. However, the violation of coughing on another person was treated by these children as more like a moral violation, one which infringed on the rights of others. If more benign violations of social etiquette had been chosen, this result would not likely have been found.

Our last hypothesis was that boys' gender-role violations that involve physical appearance would be judged to be more serious than similar transgressions on the part of girls. This hypothesis was confirmed, especially for hairstyles.

We also wanted to explore the children's attitudes about the different categories of gender-role transgressions. We found that children in this age range clearly make some fine

distinctions about what kinds of violations are and are not desirable. They did not think well of girls who wanted to grow up to be daddies or boys who wanted to grow up to be mommies. On the other hand, they seemed to think that playing with the toys of the other gender was at least moderately positive. On a number of items girls had more positive attitudes about children transgressing gender barriers than did boys, especially when it was girls who were doing the transgressing.

We also wanted to examine whether the gender-role transgressions of boys and girls are judged differently. Here the findings are quite clear and very interesting. In this study, 3- to 7-year-old children had more negative attitudes about boys who had feminine hairstyles and, to a lesser degree clothing, than girls who had masculine hairstyles or clothing. They were more negative about boys who wanted to be nurses than about girls who wanted to be doctors. However they had quite positive attitudes about boys playing with a toy kitchen or playing the traditional girls' games of hopscotch and jumprope. Girls, on the other hand were judged more negatively when they played loudly and roughly or when they played baseball or football, or with cars than were boys who crossed comparable gender barriers.

References

Blakemore, J. E. O., LaRue, A. A., & Olejnik, A. B. (1979). Sex-appropriate toy preference and the ability to conceptualize toys as sex-role related. Developmental Psychology, 15, 339-340.

Carter, D. B., & McCloskey, L. A. (1983-1984). Peers and the maintenance of sex-typed behavior: The development of children's conceptions of cross-gender behavior in their peers. Social Cognition, 2, 294-314.

Carter, D. B., & Patterson, C. J. (1982). Sex roles as social conventions: The development of children's conceptions of sex-role stereotypes. Child Development, 18, 812 - 824.

Caldera, Y. M., Huston, A. C., & O'Brien, M. (1989). Social interaction and play patterns of parents and toddlers with feminine, masculine, and neutral toys. Child Development, 34, 70-76.

Deaux, K., & Kite, M. (1993). Gender stereotypes. In F. L. Denmark & M. A. Paludi (Eds.), Psychology of Women: A Handbook of Issues and Theories (pp. 107-132). Westport: Greenwood Press.

Huston, A. C. (1983). Sex typing. In E. M. Hetherington (Ed.), P. H. Mussen (Series Ed.), Handbook of child psychology: Vol. 4. Socialization, personality, and social development (pp. 387 - 467.) New York: Wiley.

Levy, G. D., Taylor, M. G., & Gelman, S. A. (1995). Traditional and evaluative aspects of flexibility in gender roles, social convention, moral rules, and physical laws. Child Development, 66, 515-531.

Martin, C. L. (1989). Children's use of gender-related information in making social judgments. Developmental Psychology, 25, 80-88.

Martin, C. L. (1991). The role of cognition in understanding gender effects. In H. Reese (Ed.), Advances in Child Development and Behavior, 23, 113-147.

Martin, C. L. (1993). New directions for investigations of children's gender knowledge. Developmental review, 13, 184-204.

Martin, C. L., & Halverson, C. F. (1981). A schematic processing model of sex typing and stereotyping in children. Child Development, 52, 1119-1134.

Martin, C. L., & Halverson, C. F. (1987). The roles of cognition in sex role acquisition. In D. B. Carter (Ed.), Current Conceptions of Sex Roles and Sex Typing (pp. 123 -137). New York: Praeger.

Martin, C. L., Wood, C. H., & Little, J. K. (1990). The development of gender stereotype components. Child Development, 61, 1891-1904.

O'Brien, M. & Huston, A. C. (1985). Development of sex-typed play in toddlers. Developmental Psychology, 21, 866-871.

Poulin-Dubois, D., Serbin, L. A., Kenyon, B., & Derbyshire, A. (1994). Infant's intermodal knowledge about gender. Developmental Psychology, 30, 436-442.

Roopnarine, J. L., & Mounts, N. S. (1987). Current theoretical issues in sex roles and sex typing. In D. B. Carter (Ed.), Current Conceptions of Sex Roles and Sex Typing (pp. 7-31). New York: Praeger.

Signorella, M. L. (1987). Gender schemata: Individual differences and context effects. In L. S. Liben & M. L. Signorella (Eds.), New directions for child development: No. 38. Children's gender schemata (pp. 23 - 37). San Francisco: Jossey Bass.

Signorella, M. L., Bigler, R. S., & Liben, L. S. (1993). Developmental differences in children's gender schemata about others: A meta-analytic review. Developmental Review, 13, 147-183.

Smetana, J. G. (1986). Preschool children's conceptions of sex-role transgressions. Child Development, 57, 862-871.

Stoddart, T., & Turiel, E. (1985). Children's conceptions of cross-gender activities. Child Development, 56, 1241 - 1252.

Thompson, S. K. (1975). Gender labels and early sex-role development. Child Development, 46, 339-347.

Table 1

Questions Asked of the Children (Form A)[a]

---

1. Toy kitchen (accompanied by picture)
   a. Who usually plays with a toy kitchen: boys or girls?_____
   b. Can boys also play with a toy kitchen?_____
   c. How much would you like being friends with a boy who plays with a toy kitchen?_____ (Scored with a 5-point Likert scale using smiley faces ranging from "I would really not like it", through "I would like it a lot.")
   d. What's it like when a boy plays with a toy kitchen?_____ (Scored with a 5-point Likert scale ranging from "very bad" through "very good.")
2. Eating with fingers[b]
   a. How do people eat ice cream: with a spoon or with their fingers?_____
   b. Can people also eat with their fingers?_____
   c. How much would you like being friends with someone who eats with their fingers?_____
   d. What's it like when a person eats with their fingers?_____

The remaining questions were scored in the same manner as Questions 1 and 2.

3. Boy hair (accompanied by picture)
4. Nurse
5. Daddy

Table 1, continued

6.	G. I. Joes (accompanied by picture)
7.	Traditional male sports (football & baseball)
8.	Boy clothes (accompanied by picture)
9.	Stealing money (versus asking for it)[c]
10.	Loud and rough play with jumping and yelling
11.	Cars (accompanied by picture)
12.	Coughing on another person (versus covering their mouth)[b]
13.	Girl clothes (accompanied by picture)
14.	Doctor
15.	Quiet/gentle play
16.	Girl hair (accompanied by picture)
17.	Pinching (versus saying hello when meeting someone)[c]
18.	Barbies (accompanied by picture)
19.	Mommy
20.	Traditional female games (hopscotch and jump-rope)

[a]An alternate form (Form B) with questions in a different order was also used.

[b]Social norm question

[c]Moral norm question

Table 2

Age Differences in Knowledge of the Items

Item	F (2,84)[a]	p	Means		
			Y	M	O[b]
Social Items					
Eating with fingers		ns	1.37	1.28	1.32
Coughing		ns	1.12	1.09	1.03
Moral Items					
Stealing money	3.27	.05	1.62	1.35	1.36[c]
Pinching	3.25	.05	1.16	1.13	1.00[d]
Female Stereotyped Items					
Girl hair		ns	1.87	1.91	1.93
Girl clothes	3.70	.05	1.42	1.42	1.67[c]
Toy kitchen	4.30	.02	1.63	1.57	1.79[d]
Barbies	3.73	.05	1.63	1.78	1.83[c]
Mommy	5.14	.01	1.25	1.62	1.59[c]
Nurse	3.13	.05	1.38	1.46	1.63[c]
Hopscotch/jump-rope	5.31	.01	1.44	1.56	1.70[c]
Quiet/gentle play		ns	1.27	1.41	1.49

Table 2, continued

Item	F (2,84)	p	Means		
			Y	M	O
Male Stereotyped Items					
Boy hair		ns	1.15	1.15	1.03
Boy clothes	6.48	.002	1.31	1.11	1.11[e]
Cars		ns	1.35	1.23	1.21
G.I. Joes		ns	1.31	1.22	1.15
Daddy	8.27	.001	1.22	1.06	1.00[e]
Doctor		ns	1.26	1.33	1.24
Football/baseball		ns	1.13	1.18	1.07
Loud/rough play		ns	1.25	1.29	1.21

[a]Because some subjects did not provide usable answers to some questions, degrees of freedom varied from (2,81) to (2,84).

[b]Y = youngest children ranging in age from 38 to 48 months; M = middle age group, ranging from 49 to 60 months; O = oldest group, ranging from 61 to 91 months.

[c]Significant difference between the oldest and youngest groups.

[d]Oldest group significantly different from younger two groups.

[e]Youngest group significantly different from older two groups.

Table 3

Children's Judgments about the Possibility of Engaging in Gender-Role, Moral, and Social Transgressions

Transgression	Rating[a]
Boy playing jumprope/hopscotch	1.96
Boy playing with kitchen	1.93
Girl playing with cars	1.92
Girl becoming doctor	1.85
Boy playing quietly	1.83
Girl playing rough	1.83
Boy becoming nurse	1.80
Girl playing with G.I. Joes	1.79
Girl having boys' hairstyle	1.70
Eating with fingers	1.70
Boy playing with Barbies	1.69
Girl wearing boys' clothes	1.61
Girl playing baseball/football	1.60
Boy wearing girls' clothes	1.56
Stealing money	1.52

Table 3, continued

Transgression	Rating[a]
Boy having girls' hairstyle	1.37
Boy becoming mommy	1.31
Pinching someone	1.29
Coughing on someone	1.24
Girl becoming daddy	1.20

[a]An answer of yes was coded "2", and an answer of no was coded "1", therefore scores above 1.5 tend to indicate that the children believed the norm violation to be possible.

Table 4

Evaluative Ratings of Gender-Role, Moral, and Social Transgressions

Transgression	Bad/Good[a]	Friends with[a]
Boy playing with kitchen	4.03	4.21
Boy playing jumprope/hopscotch	3.84	3.90
Girl playing with G.I. Joes	3.67	3.72
Boy playing quietly	3.64	3.67
Girl playing with cars	3.64	3.66
Girl becoming doctor	3.57	3.62
Boy playing with Barbies	3.56	3.48
Eating with fingers	3.49	3.55
Girl having boys' hairstyle	3.23	3.43
Girl wearing boys' clothes	3.22	3.22
Boy wearing girls' clothes	3.01	2.97
Girl playing rough	2.97	3.05
Girl playing baseball/football	2.93	3.05
Boy becoming nurse	2.93	2.93
Girl becoming daddy	2.85	2.69
Boy having girls' hairstyle	2.61	2.38

Table 4, continued

Transgression	Bad/Good[a]	Friends with[a]
Stealing money	2.58	2.56
Boy becoming mommy	2.48	2.45
Coughing on someone	1.66	1.60
Pinching someone	1.62	1.42

[a]Items were scored on a 5-point scale, with 5 in the positive direction.

Table 5

Gender Differences and Interactions in Evaluations of the Norm Transgressions

Question Transgression	F (1,84)[a]	p	Means
Effects of Participants' Gender			
How much would you like to be friends with:			
Girl with boys' hairstyle	12.85	.001	B = 2.90; G = 3.91
Boy with girls' hairstyle	6.18	.02	B = 1.98; G = 2.74
Girl becoming a doctor	9.97	.005	B = 3.27; G = 3.92
What is it like when:			
Girl with boys' hairstyle	11.92	.001	B = 2.74; G = 3.67
Boy with girls' hairstyle	8.71	.005	B = 2.21; G = 2.96
Girl becoming a doctor	5.35	.05	B = 3.24; G = 3.85
Girl becoming a daddy	7.28	.01	B = 2.49; G = 3.17
Gender X Age Interactions			
How much would you like to be friends with:			
Girl playing with cars	3.95	.05	YB = 3.08; YG = 3.93 MB = 3.00; MG = 3.83 OB = 4.40; OG = 3.62[c]

Table 5, continued

Question Transgression	F (1,84)[a]	p	Means
What is it like when:			
Girl with boys' hairstyle	4.62	.05	YB = 2.92; YG = 3.64 MB = 2.27; MG = 4.33 OB = 3.07; OG = 3.30[d]
Boy with girls' hairstyle	3.82	.05	YB = 1.83; YG = 3.64 MB = 2.40; MG = 2.58 OB = 2.30; OG = 2.71[e]

[a]Because some subjects did not provide usable answers to some questions, degrees of freedom varied from (1,81) to (1,84) for the effects of gender, and (2,81) to (2,84) for the interactions.

[b]Y = youngest children ranging in age from 38 to 48 months; M = middle age group, ranging from 49 to 60 months; O = oldest group, ranging from 61 to 91 months.

[c]Oldest boys significantly different from middle boys.

[d]Middle boys significantly different from middle and youngest girls.

[e]Youngest girls significantly different from other groups.

Table 6

Gender Differences in the Children's Evaluations of the Acceptability of the Combined Gender-Role Transgressions

Question Transgression	F (1,84)[a]	p	Means[b]
How much would you like to be friends with a child who adopted the other gender's behavior or attribute:[c]			
Girl hair/boy hair	16.87	.001	B = 2.44; G = 3.32
Nurse/doctor	6.94	.01	B = 2.95; G = 3.53
Quiet/rough	4.55	.05	B = 3.12; G = 3.57
What is it like when a child adopts the other gender's behavior or attribute?[c]			
Girl hair/boy hair	17.90	.001	B = 2.47; G = 3.30
Nurse/doctor	6.80	.05	B = 2.95; G = 3.36
Mommy/daddy	6.20	.05	B = 2.37; G = 2.90

[a]Because some subjects did not provide usable answers to some questions, degrees of freedom varied from (1,81) to (1,84).

[b]B = boys; G = girls

[c]Items were scored on a 5-point scale, with 5 in the positive direction.

Table 7

Differences in the Children's Evaluative Judgments about the Transgressions as a Function of the Gender-Relatedness of the Item

Question Transgression	F (1,84)[a]	p	Means
How much would you like to be friends with a child who adopted the other gender's behavior or attribute:[b]			
Hair	30.05	.001	Girl with boy's hair = 3.43 Boy with girl's hair = 2.40
Clothing	4.92	.01	Girl with boy's clothes = 3.24 Boy with girl's clothes = 2.99
Occupation	10.07	.005	Girl becoming doctor = 3.61 Boy becoming nurse = 2.95
Toys	11.08	.001	Girl playing with cars = 3.63 Boy playing with kitchen = 4.19
Games	21.44	.001	Girl playing baseball/football = 3.02 Boy playing hopscotch/jumprope = 3.90
Play style	13.40	.001	Girl playing loudly and roughly = 3.03 Boy playing quietly = 3.68
Dolls (Barbie/G. I. Joe)		.ns	
Parental role (Mommy/Daddy)		.ns	

Table 7, continued

Question Transgression	F (1,84)[a]	p	Means
What is it like when a child adopts the other gender's behavior or attribute?[c]			
Hair	18.15	.001	Girl with boy's hair = 3.23 Boy with girl's hair = 2.61
Occupation	10.22	.005	Girl becoming doctor = 3.57 Boy becoming nurse = 2.93
Parental role	5.09	.05	Girl becoming daddy = 2.83 Boy becoming mommy = 2.45
Toys	6.29	.05	Girl playing with cars = 3.59 Boy playing with kitchen = 4.03
Games	26.86	.001	Girl playing baseball/football = 2.92 Boy playing hopscotch/jumprope = 3.84
Play style	13.40	.001	Girl playing loudly and roughly = 2.94 Boy playing quietly = 3.64
Dolls (Barbie/G. I. Joe)		.ns	
Clothing		.ns	

[a]Because some subjects did not provide usable answers to some questions, degrees of freedom varied from (1,81) to (1,84).

[b]Items were scored on a 5-point scale, with 5 in the positive direction.

Figure 1. Children's Knowledge about the Social, Moral, and Gender Norms

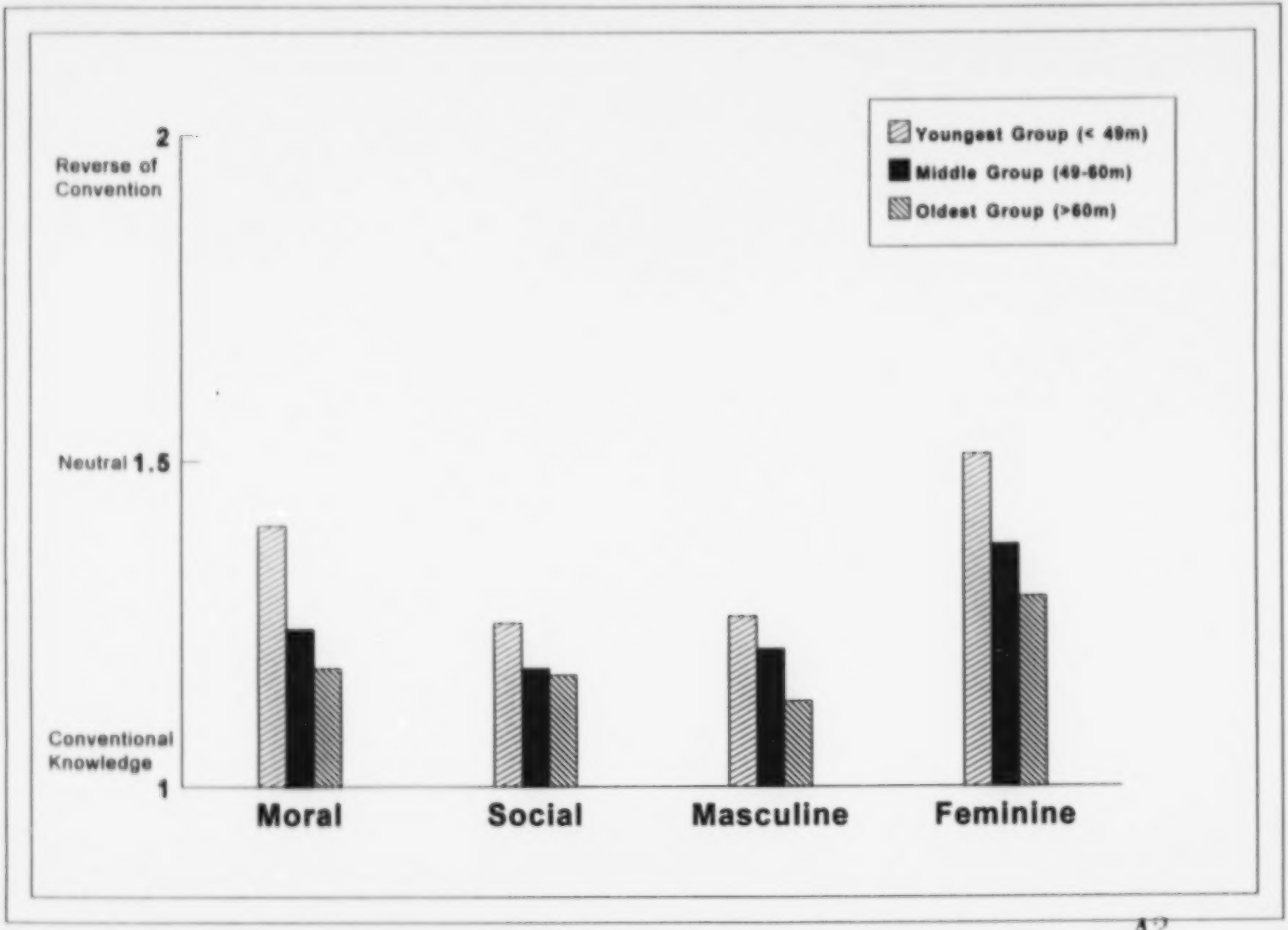

Figure 2. Children's Judgments about the Possibility of Violating Social, Moral, and Gender Norms

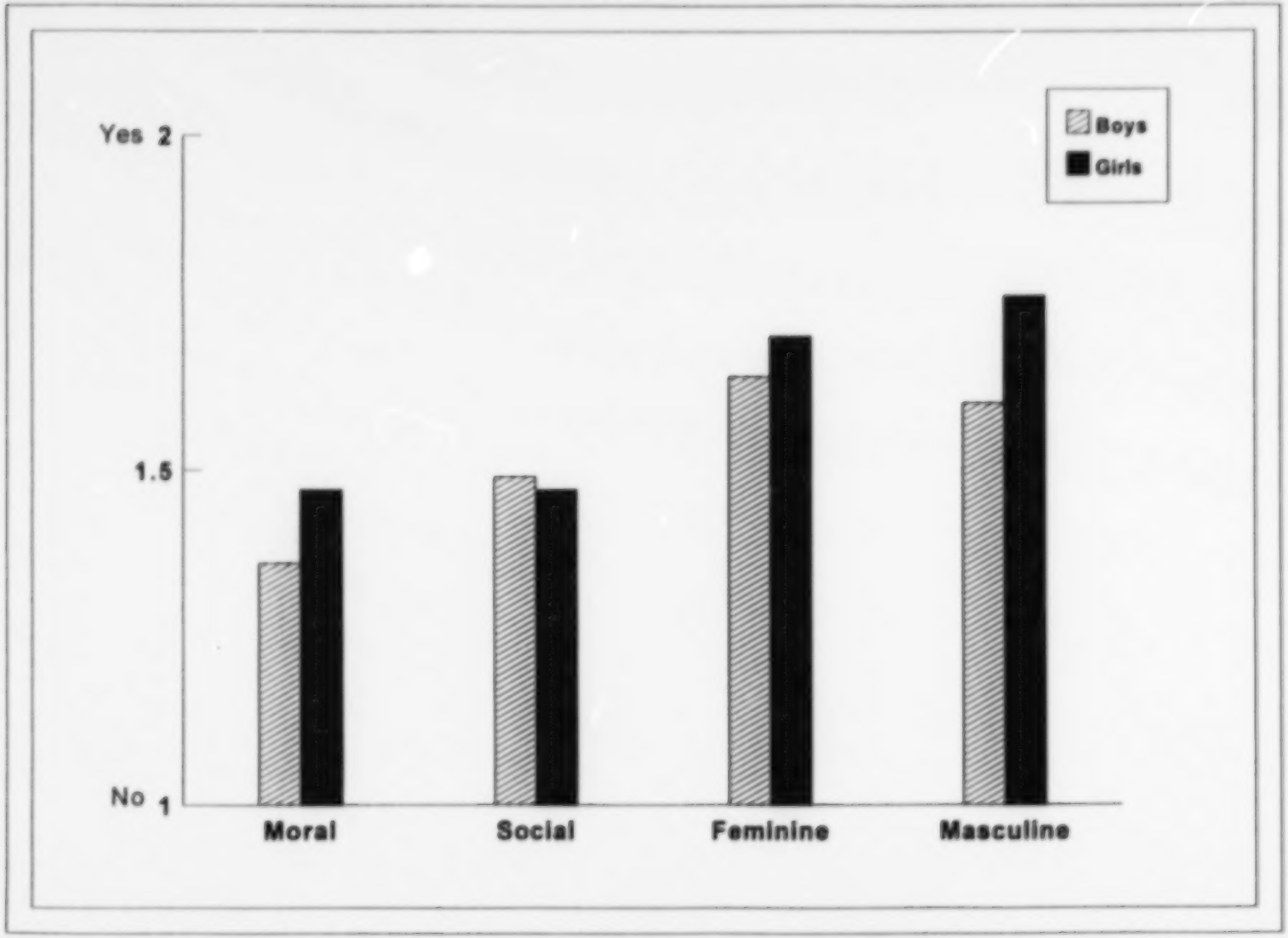

Figure 3. Children's Evaluations of Comparable Gender-role Deviations

How much would you like to be friends with?

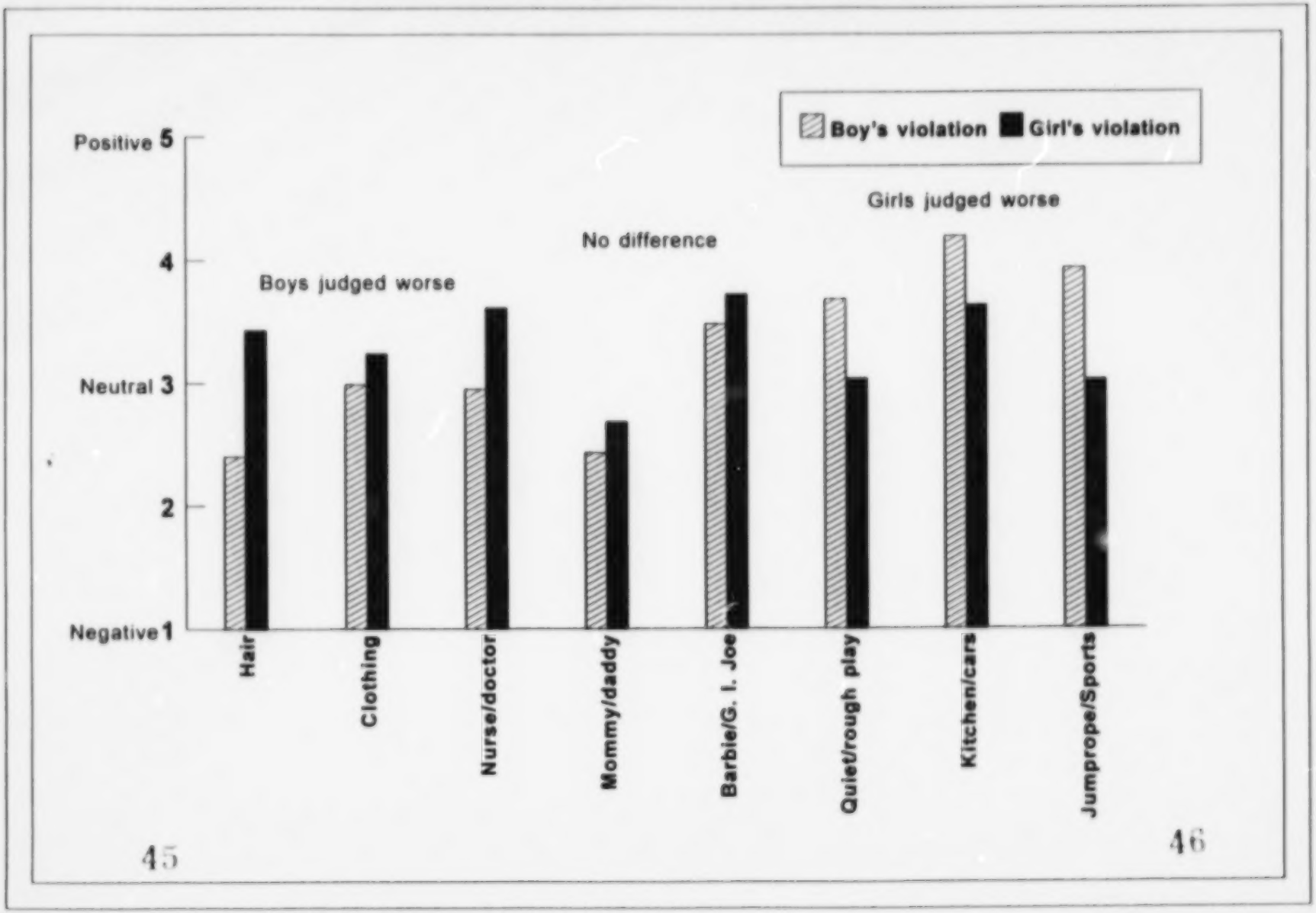

Figure 4. Children's Evaluations of Social, Moral, and Gender-Role Deviations